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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------------------|-------------|----------------------|-------------------------------|------------------|
| 10/768,415 | 01/30/2004 | Philip Emery | 7015 | 6942 |
| Gauthier & Connors, LLP Suite 3300 | | | EXAMINER SHEWAREGED, BETELHEM | |
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| ,, | | • | 1794 | |
| • | | | | |
| | • | | MAIL DATE | DELIVERY MODE |
| | | | 01/23/2008 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | | |
|--|---|--|--|--|--|--|
| | 10/768,415 | BLISH ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Betelhem Shewareged | 1794 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE | N. hely filed the mailing date of this communication. D (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on 05 No. | <u>ovember 2007</u> . | • | | | | |
| <u>'=</u> | · · · · · · · · · · · · · · · · · · · | | | | | |
| • • | 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | |
| 4) | vn from consideration. | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) accomplicated any not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine | epted or b) objected to by the Idrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj | e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d). | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. Certified copies of the priority documents have been received in Application No Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) | 4) Interview Summary Paper No(s)/Mail Da | | | | | |
| Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date | 5) Notice of Informal P | | | | | |

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DETAILED ACTION

1. Applicant's response filed on 11/05/2007 has been fully considered. Claims 26, 29 and 32 are canceled, and claims 25, 27, 28, 30, 31 and 33-45 are pending.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 25, 27, 28, 30, 31, 33-39 and 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. (US 5,190,609) in view of Shih (US 5824,398), Ast (US 6,248,427 B1) and Hughen et al. (US 5,747,192).
- 4. Lin discloses a heat shrinkable label comprising a backing sheet (col. 2, line 42), a first pressure sensitive adhesive (PSA) on the backing layer (col. 2, line 56), a first shrinkable layer on the first PSA (col. 2, line 44), graphics on the first shrinkable layer (col. 3, line 23), a second pressure sensitive adhesive (PSA) on the graphics (col. 3, line 32), and a second shrinkable layer on the second PSA (col. 2, line 44). The first and second shrinkable layers are made of polypropylene (col. 2, line 45). The thickness of the shrinkable layer is 1.25 mils (col. 4, line 63).
- 5. With respect to the claimed stiffness value, the experimental modification of this prior art in order to ascertain optimum operating conditions fails to render applicants' claims patentable in the absence of unexpected results. *In re Aller*, 105 USPQ 233.

One of ordinary skill in the art would have been motivated to adjust the stiffness value in order to optimize the integrity of the film. A prima facie case of obviousness may be rebutted, however, where the results of the optimizing variable, which is known to be result-effective, are unexpectedly good. *In re Boesch and Slaney*, 205 USPQ 215.

- 6. Lin does not teach the claimed onset shrinkage temperature value. However, Shih teaches a shrink film having an onset shrink temperature of 64 degree C or less (Examples and Table II). Lin and Shih are analogous art because they are from the same field of endeavor that is the shrink film art. At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the teaching of Shih with the invention of Lin, and the motivation would be, as Shih suggests, to provide a shrink film having heat resistance, stress crack resistance and excellent melt flowability (col. 7, lines 24-26).
- 7. Lin does not teach the use of polystyrene as the shrinkable layers. However, Ast teaches adhesive label comprising a shrinkable cover foil that can be made of polypropylene, polystyrene, polyethylene or polyester (col. 3, lines 37-42).
- 8. Lin and Ast are analogous art because they are from the same field of endeavor that is the heat shrinkable label art. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use polystyrene to make the shrinkable layers of Lin since the examiner takes Official Notice of the equivalence of polyethylene and polystyrene for there use in the heat shrinkable art and the selection of any of there known equivalents to make the shrinkable layers would be within the level of ordinary skill in the art.

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- 9. With respect to the shrink and growth direction of the label, it is well known in the shrinkable label art for the label to be applied on a battery to shrink up to 60% in the direction normal to the axis of the battery, and to shrink –2 to +5% in the axial direction, wherein negative shrinkage means elongation. Such characteristics are well known in the art before the claimed invention (see col. 5, lines 19-36 of Hughen).
- 10. Claims 25, 27, 28, 30, 31, 33-43, 45 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ast (US 6,248,427 B1) in view of Shih (US 5824,398) and Hughen et al. (US 5,747,192).
- 11. Ast discloses an adhesive shrinkable label comprising a carrier (col. 4, line 17), an adhesive on the carrier (col. 4, line 15), a carrier material on the adhesive (col. 4, lines 7-13), wherein the carrier material comprises metallic layer and non-metallic layer, a laminating adhesive on the carrier material (col. 5, line 52), imprints on the laminating adhesive, and a shrinkable cover foil on the imprint (col. 3, line 39). Ast does not teach the claimed onset shrinkage temperature value. However, Shih teaches a shrink film having an onset shrink temperature of 64 degree C or less (Examples and Table II). Ast and Shih are analogous art because they are from the same field of endeavor that is the shrink film art. At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the teaching of Shih with the invention of Ast, and the motivation would be, as Shih suggests, providing a shrink film having heat resistance, stress crack resistance and excellent melt flowability (col. 7, lines 24-26).

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12. With respect to the claimed stiffness value, the experimental modification of this prior art in order to ascertain optimum operating conditions fails to render applicants' claims patentable in the absence of unexpected results. *In re Aller*, 105 USPQ 233. One of ordinary skill in the art would have been motivated to adjust the stiffness value in order to optimize the integrity of the film. A prima facie case of obviousness may be rebutted, however, where the results of the optimizing variable, which is known to be result-effective, are unexpectedly good. *In re Boesch and Slaney*, 205 USPQ 215.

- 13. Ast teaches the shrinkable cover foil has a thickness of 20-70 micrometer (0.02-0.07mm) (col. 3, line 43 of Ast). Ast discloses that the shrinkable foil can carry additional layers on top and bottom side (col. 3, line 63). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add a transparent protective layer on the external side of the shrinkable cover foil so as to protect the foil during manufacturing, packaging, and/or transportation because adding a protective layer is on a laminate and/or a label is well known in the laminate and/or label art.
- 14. With respect to the shrink and growth direction of the label, it is well known in the shrinkable label art for the label to be applied on a battery to shrink up to 60% in the direction normal to the axis of the battery, and to shrink –2 to +5% in the axial direction, wherein negative shrinkage means elongation. Such characteristics are well known in the art before the claimed invention (see col. 5, lines 19-36 of Hughen).

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Response to Arguments

15. Applicant's argument is based on that Shih teaches onset shrinkage temperature of 64 degree or less, which is lower than the claimed onset shrinkage temperature. This argument is not persuasive because the shrink film of Shih is stable below it's onset temperature, and the onset temperature of Shih is lower than at least 75 degree C, thus the shrink film of Shih is stable below the at least 75 degree C. Thus claims 25, 27, 28, 30, 31 and 33-45 stand rejected.

Conclusion

- 16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
- 17. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Betelhem Shewareged whose telephone number is 571-

272-1529. The examiner can normally be reached on Mon.-Fri. 8:00AM-4:30PM.

19. If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

20. Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BS

January 18, 2008.

ETELHEM SHEWAREGED

PRIMARY EXAMINER